AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 7, with the following amended paragraph:

Such a thin-film magnetic head has a yoke magnetically coupled with two magnetic poles separated [[with]] from each other by a recording gap, a coil wound around the yoke, a pair of trace conductors electrically connected to the coil, and connection bumps electrically connected to the pair of trace conductors. Write operation of magnetic information is performed by flowing a write current through the coil via the connection bumps and the trace conductors.

Please replace the paragraph beginning on page 2, line 2, with the following amended paragraph:

If the wave shape of current flowing through the inductive write head element of the thin-film magnetic head is deformed, magnetic [[pattern]] patterns written in a magnetic medium will become distorted and thus write and read operations of data will become difficult. Also, in order to improve the non-linear transition shift (NLTS) in dynamic characteristics, it is necessary to shorten a rising time of the wave shape of current flowing through the coil.

Please replace the paragraph beginning on page 2, line 10, with the following amended paragraph:

Therefore, required for the wave shape of current flowing through the coil are (1) to maintain a profile of the rectangular wave shape pulses provided from the current source as much as possible, (2) to have a short rising time, and (3) to have a

high current value [[with]] while holding the rectangular wave shape in order to obtain a strong write magnetic field.

Please replace the paragraph beginning on page 8, line 15 and ending on page 9, line 16, with the following amended paragraph:

Fig. 1 illustrates a simple partial configuration of yoke layers, a coil conductor and trace conductors of a thin-film magnetic head as a preferred embodiment according to the present invention, Fig. 2 illustrates the partial configuration of the yoke layers, the coil conductor and the trace conductors of the thin-film magnetic head in this embodiment, seen from a different direction from Fig. 1, Fig. 3 illustrates the partial configuration of the yoke layers, the coil conductor and the trace conductors of the thin-film magnetic head in this embodiment, seen from a further different direction from Fig. 1, Fig. 4 illustrates a partial configuration of the trace conductors in this embodiment, seen from a different direction from Fig. 3, ~~of Fig. 1,~~ Fig. 5 illustrates another configuration of the trace conductors in this embodiment, Fig. 6 illustrates another configuration of the trace conductors in this embodiment, seen from a different direction from Fig. 5, Fig. 7 illustrates a top view of another configuration of the trace conductors in this embodiment, Fig. 8 illustrates a bottom view of another configuration of the trace conductors in this embodiment, Fig. 9 illustrates one side view of another configuration of the trace conductors in this embodiment, Fig. 10 illustrates the other side view of another configuration of the trace conductors in this embodiment, and Fig. 11 illustrates the whole configuration of the thin-film magnetic head in this embodiment.

Please replace the paragraph beginning on page 9, line 17 and ending on page 10, line 7, with the following amended paragraph:

In Figs. 1 to 10, reference numeral 10 denotes the coil conductor, made of an electrically conductive material such as copper for example, in a write head element of the thin-film magnetic head, 11 denotes a pair of yoke layers made of a ferromagnetic material such as permalloy and provided [[with]] at its top ends with a pair of magnetic poles [[faced]] facing each other via an insulation gap and rear ends magnetically coupled with each other, 12 and 13 denote first and second trace conductors, made of an electrically conductive material such as copper for example, with one ends respectively connected to both ends of the coil conductor 10, 14 and 15 denote first and second connection bumps respectively and electrically connected to the other ends of the first and second trace conductors 12 and 13, and 16 and 17 denote connection electrodes or connection pads made of a gold for example and formed on the first and second connection bumps 14 and 15, respectively.

Please replace the paragraph beginning on page 10, line 24 and ending on page 11, line 10, with the following amended paragraph:

The first and second trace conductor 12 and 13 [[has]] have first sections shown in Figs. 1 to 4 and electrically connected with the coil conductor 10, and a second sections shown in Figs. 5 to 10 and electrically connected with the first and second bumps 14 and 15. The second sections shown in Figs. 5 to 10 are located in a direction of an arrow 21 from the first sections shown in Figs. 1 to 4, and these first sections and second sections are connected with each other in line. Although it is illustrated in Figs. 1 to 3 that the first sections of the first and second trace conductor

12 and 13 and both ends of the coil conductor 10 are separated [[to]] from each other, these are actually connected with each other.

Please replace the paragraph beginning on page 11, line 11 and ending on page 12, line 7, with the following amended paragraph:

The first trace conductor 12 is substantially constituted by a lower conductor layer 12a and an upper conductor layer 12b connected in parallel with each other, and the second trace conductor 13 is substantially constituted by a lower conductor layer 13a and an upper conductor layer 13b connected in parallel with each other. The upper conductor layer 12b of the first trace conductor 12 and the lower conductor layer 13a of the second trace conductor 13 are arranged from top to bottom to face [[to]] each other in parallel. The upper conductor layer 13b of the second trace conductor 13 and the lower conductor layer 12a of the first trace conductor 12 are also arranged from top to bottom to face [[to]] each other in parallel. The upper conductor layer 12b of the first trace conductor 12 and the upper conductor layer 13b of the second trace conductor 13 are arranged from side to side, and the lower conductor layer 12a of the first trace conductor 12 and the lower conductor layer 13a of the second trace conductor 13 are also arranged from side to side. Therefore, in a sectional plane of the axes of these four conductor layers 12a, 13a, 12b and 13b, currents in the opposite direction [[with]] from each other will flow through neighboring conductor layers [[neighbored]]from up to down and from side to side.

Please replace the paragraph beginning on page 12, line 11 and ending on page 13, line 2, with the following amended paragraph:

Through the lower conductor layer 12a and the upper conductor layer 12b of the first trace conductor 12, current flows from frontward to backward in the figure, and conversely through the lower conductor layer 13a and the upper conductor layer 13b of the second trace conductor 13, current flows from backward to frontward in the figure. Due to the current, a magnetic field indicated by an arrow 22 in the figure is induced around each conductor layer. These magnetic fields counter with each other between the lower conductor layer 12a and the upper conductor layer 13b and also between the lower conductor layer 13a and the upper conductor layer 12b to greatly decrease stray inductances caused by the currents. On the other hand, due to the reversed current flowing, the electrical fields strengthen [[with]] each other between the lower conductor layer 12a and the upper conductor layer 13b and also between the lower conductor layer 13a and the upper conductor layer 12b to increase stray capacitances.

Please replace the paragraph beginning on page 13, line 3, with the following amended paragraph:

The stray capacitance can be controlled to prevent ~~from excess~~ increasing excessively by adjusting a sectional shape of the conductor layer, a width and a length of the conductor layer, relative positions of the lower conductor layer and the upper conductor layer, a vertical space D1 between the lower conductor layer and the upper conductor layer, a horizontal space D2 between the lower conductor layers or between the upper conductor layers, or combination of the conductor layers and

normal conductors traveling in parallel with these conductor layers. This stray capacitance also varies depending upon a dielectric constant of the material surrounding the conductor layers. For example, if the upper conductor layer 12b of the first trace conductor 12 and the upper conductor layer 13b of the second trace conductor 13 are exposed at the surface of the insulation layer, the dielectric constant at the upper surfaces of the upper conductor layers decreases to nearly 1.0 and thus the stray capacitance decreases accordingly. The stray capacitance will also decrease if the insulation layer around the conductor layers is formed by a material with a lower dielectric constant such as a resist material or a polyimide.

Please replace the paragraph beginning on page 14, line 2, with the following amended paragraph:

By decreasing the stray inductance and by properly adjusting the stray capacitance, it is possible to flow a write current having a short rising time and a high current value through the coil conductor [[with]] while maintaining a profile of rectangular wave shape input pulses as much as possible. Due to the short rising time, correct writing operations can be expected even if the write frequency is as high as 300 MHz for example.

Please replace the paragraph beginning on page 14, line 17 and ending on page 15, line 2, with the following amended paragraph:

This profile of the input impedance characteristics according to the conventional magnetic head is reproduced as a profile A shown in Fig. 14 by using

an equivalent circuit. [[Whereas]] However, an equivalent circuit with a profile B of the input impedance characteristics shown in Fig. 14, ~~rising~~ rises abruptly to its peak value and also ~~falling~~ falls abruptly from the peak ~~value, is formed~~ value. The latter equivalent circuit has the same inductance but a larger capacitance with respect to the former equivalent circuit. These inductance and capacitance correspond to the stray inductance and the stray capacitance of the first and second trace conductors, respectively.

Please replace the paragraph beginning on page 15, line 11, with the following amended paragraph:

Therefore, according to this embodiment, since the stray inductance is decreased and the stray capacitance is properly adjusted, it is possible to flow a write current having a short rising time and a high current value through the coil conductor [[with]] while maintaining a profile of rectangular wave shape input pulses as much as possible.

Please replace the paragraph beginning on page 15, line 17, with the following amended paragraph:

Fig. 17 illustrates characteristics of input impedance versus frequency with respect to a case (profile C) where first and second trace conductors are constituted by two conductor layers arranged in parallel with a plane as the conventional art and to a case (profile D) where first and second trace conductors are constituted by four conductor layers arranged as in this embodiment.